trave; and in the caves the whole wooden construction is generally repeated.

Another peculiarity is the entire absence of an arch of construction, not only in these Buddhist, but in all Hindoo buildings down to a very late period. When first I saw their curvilinear forms, and what I could not but think were discharging arches over all the openings, I felt convinced that the knowledge of the arch must have extended to this country at a very early period; further researches, however, have convinced me that such was not the case, but that they are all copies of curvilinear-roofed wooden buildings; indeed, in the oldest caves the wood used actually remains, as at Carli, though of course used only as an ornament; and in the modern caves we have identically the same forms repeated in the rock, but so minutely copied that even the mortices, dovetails, and pins of the carpentry are minutely copied. Even in the present day, after the long experience of the arch-building Mahometans, the Hindoos never willingly use an arch, though they frequently cut the faces of their stones in the forms of arches; and in some of the oldest Mahometan buildings it is quite curious to observe, where they employed Hindoo builders, how they constructed the large pointed arches their style required on their own horizontal principles. I have seen an arch 20 feet wide and 40 feet high so built. I need scarcely add, it is now very much crippled, and most of those around it have fallen in. Had the Hindoos had their own way, they would have laid one long stone-beam across the opening, which, constructively, would have been the best form; but the Moslems required their own pointed form; and as the rude warriors would not, or could not, be their own masons, they were obliged to put up with what their conquered subjects could do for them.

Another peculiarity, the last I shall mention, is the mode in which these caves are lighted. At first I was inclined to believe it was a peculiarity of cave architecture, and arose from the necessities of that mode of making temples; but now I am convinced that it was also used in the structural originals from which they were copied. In the Chaitya caves the whole light is introduced through one great semicircular or horse-shoe opening or window immediately over the entrance. To a person approaching the cave this is partially concealed, if it was not wholly so, by an external screen, which originally supported music-galleries, and was covered by woodwork and wooden ornaments. From its exposed situation this has in every instance perished, but the mortices and holes are almost sufficient to enable us to restore it. Sometimes, I have reason to believe, the space between the inner and outer screens is at least partially roofed, so that a votary approaching and entering the temple would always stand in comparative gloom and shade, when a strong flood of light would from some unseen opening be thrown from behind and above him on the altar and the priests that served it. Even now, in their denuded and ruined state, the effect is most magical; and when all the arrangements were complete, I am convinced it must have been the most artistic mode of introducing light hitherto invented.

One of the most perfect specimens of lighting is universally acknowledged to be the Pantheon at Rome; it has the advantage, like the caves, of having only one opening, and that high enough not to catch the eye; but it admits the rain, and, besides, the light is a wandering light, sometimes resting on one altar, sometimes on another, and often on the devotee himself, which it never should do.

Owing to the difficulty of managing such large openings in our northern climate with the means they had at their command, our mediæval architects missed this invention, and dispersed their openings almost equally over their buildings. For the display of painted glass they were right,—for white light this Indian one is a far better plan.

I mentioned above that if we are to look for synonyms for Indian architecture, it must be among similar races, speaking the same language and professing the same religion—not among the Coptic Egyptians, whose system and race differ so totally from that of the people we have just now been talking about. It would take long to enter fully into this subject, but there are one or two points I would like to bring to your notice, if only to shew the direction in which I conceive such researches should extend.

The first is the similarity of our own Stonehenge to the monuments I have just been describing. That building consisted originally of an outer circle of stone, about 100 feet in diameter, encompassing an inner choir, of a horse-shoe form; between these two is a circle of smaller stones of a different character, and within the inner circle a fourth of like nature; the great circles consisting of the usual Sarsen stones of the neighbourhood; the smaller circles are of porphyry, or indurated potstone, that must have come from Cornwall or some distant locality: and it must further be remarked, that while the two great circles are perfectly symmetrical and regular, these do not seem ever to have been completed, or to be symmetrical with themselves or the monument in which they are placed.

Beyond the outer circle, in front of the principal and the western entrances, are detached stones, either alone or in pairs, too distant to be shewn here.

When I first visited this monument, after my return from India, the whole appeared to me so clear and intelligible, on the supposition of its being a Buddhist monument, that I have in my own mind no doubt whatever of the fact, though it may not appear to others so clear as it does to myself.

The outer circle I take to be just such an inclosure as surrounds the tope at Sanchee, with its gateways and stambas; the inner I take to be a Buddhist choir, like that at Carli and everywhere else in India; the intermediate circles I take to be *danams*, or *donums*—gifts or offerings to the temple; and I should mention that, not only at Sanchee but elsewhere in India, almost every pillar of the circles bears a short inscription, importing that the column or pillar is the gift of so-and-so; as Samanerasa danam—the gift of Samanera; Dhamagaliksasa mata danam—the gift of the mother of Dhamagaliksa, &c.

According to the same theory, the detached stones in the avenues and opposite the gateways not only become intelligible but necessary; indeed, there is no point about it that does not appear to me intelligible at once.

It may be asked what proof have we that Buddhism ever reached these shores; and though I cannot enter into this question now, I may mention what I believe is scarcely doubted, that the Woden of the Scandinavians is the Buddha of the Indians, from whom our Wednesday takes its name; and that the religion extended to and existed in the North, from whence the Teutonic element of our population came, and if they brought their language, it is not to be wondered at that they brought their religion also.

Had I been wishing to illustrate this point only, I could have brought forward examples much more like Stonehenge than anything I have yet alluded to, for there exist in India rude circles of large stones which present no recognisable difference from those in this country, as well as the simple but elaborate circles such as that of Amrabati, to which I have above referred—but I merely mention it incidentally, and have not, therefore, thought it worth while to get any drawings for the purpose.

The other and last point to which I will allude does not strictly belong to Buddhist but to Jaina architecture, which, however, is only corrupt Buddhism, and so similar to it in many respects, that the difference is scarcely recognisable. It is their mode of forming domes, which is always done by placing eight pillars in the angles of a regular octagon; the angles are then cut off by additional architraves, so as to make a polygon of sixteen sides. Sometimes this operation is repeated, so as to reduce it to thirty-two; but in small domes, a sixteen-sided polygon is near enough a circle for all practical purposes; and the dome is raised on this by concentric layers of stones, laid in horizontal bands, projecting beyond one another till they come to a point.

The eight pillars, however, are never allowed to stand alone, but the plan is reduced to a square by the addition of one pillar at each angle, and, generally, the figure is further extended by the addition of two or of four pillars on each face, and again of two, and so on. By this means the building obtains a central point under the dome of great magnificence, which is approached by four aisles, broader than the others in the ratio of 10 to 7, or of the square to the hypothenuse of a right angled isosceles triangle, which, as far as my experience goes, is the most pleasing proportion yet hit upon. In Gothic buildings, when the centre aisle is twice as high as the side ones, the proportion 2 to 1 is more suitable, but here they are all of the same height, and, consequently, such a proportion would be unpleasing.

You will see that the arrangement is that adopted by Sir C. Wren, in his famous interior of St. Stephen's, Walbrook; and so far as he followed accidentally this Indian type, he was successful. The defects of that beautiful building arise from his not fully appreciating the elegancies to which the plan he was using might lead. His dome is too large—the walls parallel to the colonnades—and there is a want of harmony in the design between the different parts, which has often been remarked, and certainly hurts the general effect.

It is not, however, so much to refer to this, that I have alluded to this mode of building, but to point out the similarity that exists between this style and that of a tomb at Mylassa, in Asia Minor, which must be familiar to you all from the illustrations contained in the Ionian antiquities of the Dilettanti Society. So identical is it in construction and form with these Indian buildings, that if its details—which are Greek, or rather, Roman—were so time-worn as to be undistinguishable, had I found the building on the banks of the Ganges, instead of the shores of the Mediterranean, I would have sketched it without remarking that there was anything peculiar or unusual about it.

It may, perhaps, be suggested that I am going far to look for a similarity, which, like that of St. Stephen's, Walbrook, may be accidental; but this is not the case, for Mylassa is on the borders of Lycia, and the only buildings known which at all resemble those singular hog-backed tombs brought to light by Sir Charles Fellows, are a class of buildings common in India, but not such as I could easily have collected had I known of their existence when I was in that country. Indeed, all these chaitya caves are rock-cut copies of buildings, with curvilinear wooden roofs, exactly similar to those of these tombs, and about as far removed from direct imitation of their wooden originals as these are. A curvilinear form for a wooden roof is in itself so singular, that when we find it so prevalent in this country, I think we are entitled to guess, at least, at some similarity or common origin.

But what renders this view of the matter still more probable is the fact, that Mr. Sharpe, in his admirable "Essay on the Lycian Language," in the appendix to Sir C. Fellows' work, clearly proves that the language of the inscriptions on the Lycian monuments is Zend, or, at least, a dialect of Sanscrit, not further removed from the original tongue than the Pali, in which the inscriptions on these Indian monuments is written. When the subject is more fully investigated, I have no doubt but that it will be fully proved that we have, at these two extremes of Asia, similar buildings erected by tribes of the race who, emanating from one common centre, spread over the whole ancient world, east and west, and are now the dominant race among mankind.

It is not by a hasty assumption of primæval antiquity, and of ill-defined generalisation of styles—which have no connection except both being equally ill understood—that we can arrive at any satisfactory conclusion on this subject,—but by carefully investigating similarities, such as those I have alluded to; and when this is done, I believe it will be found that architecture may be as usefully, and as extensively used to determine the affinities of races as language, and that the history of the world is written in most legible characters in the stone and mortar of its monuments. Viewed in this light, the study of architectural antiquity rises to a dignity it has not hitherto been able to assume. J. FERGUSSON.

PHILOSOPHY OF LABOUR.—Elihu Burritt will lecture on this subject this (Friday) night at Exeter-hall.